

Abstract

Electromechanical circuits, such as memory cells, and methods for making same are disclosed. The circuits include a structure having electrically conductive traces and supports extending from a surface of the substrate, and nanotube ribbons suspended by the supports that cross the electrically conductive traces, wherein each ribbon comprises one or more nanotubes. The electro-mechanical circuit elements are made by providing a structure having electrically conductive traces and supports, in which the supports extend from a surface of the substrate. A layer of nanotubes is provided over the supports, and portions of the layer of nanotubes are selectively removed to form ribbons of nanotubes that cross the electrically conductive traces. Each ribbon includes one or more nanotubes.